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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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REDWOOD CITY, CA 94063

EXAMINER

BOUTAH, ALINA A

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 12/03/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/522,332	LAVIAN ET AL.	
	Examiner	Art Unit	
	Alina N Boutah	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 9-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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## **DETAILED ACTION**

### ***Response to Amendment***

This action is in response to Applicant's amendment received November 6, 2003. Claims 1-7 and 9-32 are pending in the present application.

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 12, 2003 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8-15, 20-26, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,655,081 issued to Bonnell et al.

(Amended) Regarding claim 1, Bonnell et al. teach a system for managing network resources comprising:

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a network device operatively connected to a network having a processor capable of downloading a task over the network, executing the task, and providing the results from the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14); and

a network management server that requests that the network device execute a task that performs an analysis of use of network resources on one or more network devices connected to the network and receives results of the analysis from the network device for use in management of the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14).

(Amended) Regarding claim 2, the system in claim 1 wherein the task that performs an analysis of use of network resources includes operations compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 3, Bonnell et al. teach the system in claim 2 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 9, Bonnell et al. teach the system in claim 1 further comprising an application server device connected to the network and used to store tasks downloadable onto the network device (Abstract; figure 19, col. 8, lines 47-49).

(Amended) Regarding claim 10, Bonnell et al. teach the system in claim 1 wherein the task that performs an analysis of use of network resources monitors a network parameter

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associated with the network and notifies the network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

(Amended) Regarding claim 11, Bonnell et al. teach a computer-implemented method of distributing management of network resource on a network to network devices exchanging information over the network, comprising:

receiving a request on a network device to execute a task that performs an analysis of use of network resources on one or more network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

receiving an application over the network wherein the application includes operations for performing the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

processing operations on the network device that requests network parameters from a remote network device (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

transmitting the request for the network parameter over the network to the remote network (col. 7, lines 14-31); and

receiving the requested network parameter over the network from the remote network device (col. 7, lines 14-21).

(Amended) Regarding claim 12, Bonnell et al. teach the method in claim 11, further comprising:

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processing the operations for performing the task on the network device using the network parameter (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10); and

providing results of the analysis in response to the request to execute the task (col. 7, lines 7-14; col. 8, lines 63-67).

Regarding claim 13, Bonnell et al. teach the method in claim 12 wherein providing results further comprises notifying a network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

Regarding claim 14, Bonnell et al. teach the method in claim 11 wherein the task includes operations compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 15, Bonnell et al. teach the method in claim 14 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 20, Bonnell et al. teach the method in claim 11, wherein the processor on the network device executes a task that analyzes the utilization of network resources on one or more network devices connected to the network (col. 6, lines 61-67 – col. 7, lines 1-14).

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Regarding claim 21, Bonnell et al. teach the method in claim 11, further comprising an application server device connected to the network used to store tasks and download them onto the network device (Abstract; figure 19, col. 8, lines 47-49).

(Amended) Regarding claim 22, Bonnell et al. teach an apparatus for distributing network management of a network-to-network devices comprising:

a memory containing instructions when executed cause the processor to receive a request on a network device to execute a task that performs an analysis of use of network resources on one or more network devices connected to the network, receive an application over the network wherein the application has instructions for performing the task, process operations on the network device that requests network parameters from a remote network device, transmit the request for the network parameter over the network to the remote network, and receive the requested network parameter over the network from the remote network device (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14; col. 6, lines 61-67 – col. 7, lines 1-31; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

and although Bonnell et al. do not expressly teach a processor, some kind of processor must inherently be part of a network device in order to perform the mentioned task.

(Amended) Regarding claim 23, Bonnell et al. teach the apparatus of claim 22 wherein the memory contains additional instructions for execution on the processor that continue processing operations on the network device using the network parameter (col. 7, lines 14-21;

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col. 9, lines 61-67 – col. 10, lines 1-10); and provide results of the analysis in response to the request to execute the task (col. 7, lines 7-14; col. 8, lines 63-67).

(Amended) Regarding claim 24, Bonnell et al. teach the apparatus of claim 22 wherein the memory contains additional instructions for execution on the processor and providing results of the analysis that further notify the network management server when the network parameter reaches a threshold level (col. 13, lines 55-62; col. 17, lines 18-20).

Regarding claim 25, Bonnell et al. teach the apparatus of claim 22 wherein the processor executes instructions compatible with a network management protocol (col. 5, lines 60-67 – col. 6, lines 1-14).

Regarding claim 26, Bonnell et al. teach the apparatus of claim 25 wherein the network management protocol includes the simple network management protocol (SNMP) (col. 5, lines 60-67 – col. 6, lines 1-14).

(Amended) Regarding 31, Bonnell et al. teach an apparatus for distributing network management of a network to network devices exchanging information over the network comprising:

means for receiving a request on a network device to execute a task that performs an analysis of use of network resources on one or more network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);



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means for receiving an application over the network wherein the application includes operations for performing the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

means for processing operations on the network device that requests network parameters from a remote network device (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

means for transmitting the request for the network parameter over the network to the remote network (col. 7, lines 14-31); and

means for receiving the requested network parameter from the remote network device over the network (col. 7, lines 14-21).

Regarding claim 32, Bonnell et al. teach a computer program product, for distributing network management of a network to network devices exchanging information over the network, the product comprising program code instructions to cause a processor to:

receive a request on a network device to execute a task that performs an analysis of use of network resources on one or more network devices connected to the network (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

receive an application over the network wherein the application includes operations for performing the task (Abstract; col. 6, lines 61-67 – col. 7, lines 1-14);

process operations on the network device that requests network parameters from a remote network device (col. 7, lines 14-21; col. 9, lines 61-67 – col. 10, lines 1-10; figure 27b; col. 14, line 50 – col. 15, line 15);

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transmit the request for the network parameter over the network to the remote network (col. 7, lines 14-31);

and receive from the remote network device the requested network parameter over the network (col. 7, lines 14-21).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7, 16-19, and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnell et al. in view of *Infrastructure for Advanced Network Management based on Mobile Code* by Susilo et al.

Regarding claims 4, 16, and 27, Bonnell et al. fail to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the task that performs an analysis of use of network resources includes operations compatible with an object-oriented programming language. Susilo et al. teach a use of mobile agents performing tasks for network management wherein the task includes operations compatible with an object-oriented programming language (Abstract; Requirements 1 and 2, page 324, 3<sup>rd</sup> paragraph, and page 325, 1<sup>st</sup> paragraph; Security, the entire page 328). At the time the invention

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was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with an object-oriented programming language because it provides security and portability that are necessary for secure task distribution (Abstract; Security, the entire page 328; Summary, page 332, 1<sup>st</sup> paragraph).

Regarding claims 5, 17, and 28, Bonnell et al. fail to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the tasks that performs an analysis of use of network resources includes operations compatible with byte-codes executable on a virtual machine. Susilo et al. teach a use of mobile agents to perform tasks for network management wherein the task include operations compatible with byte-code executable on a virtual machine (Requirement 1, page 324, 3<sup>rd</sup> paragraph; Requirements 2, page 325, 1<sup>st</sup> paragraph; entire page 326). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with byte-code executable on a virtual machine to allow the implementation of applications that run on many different platforms, thus enhancing the system's robustness (Requirement 1, page 324, 3<sup>rd</sup> paragraph).

Regarding claims 6, 18, and 29, Bonnell et al. fail to teach the system (in claim 5), the method (in claim 19), and the apparatus of (claim 28), respectively, wherein the virtual machine is compatible with the Java Virtual Machine. Susilo et al. teach the virtual machine being compatible with Java Virtual Machine (Requirement 1, page 324, 3<sup>rd</sup> paragraph; Requirements 2, page 325, 1<sup>st</sup> paragraph; entire page 326). At the time the invention was made, it would have

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been obvious to one of ordinary skill in the art to employ a virtual machine that is compatible with Java Virtual machine because it allows the implementation of applications that run on many different platforms, thus enhancing the system's robustness (Requirement 1, page 324, 3<sup>rd</sup> paragraph).

Regarding claims 7, 19, and 30, Bonnell et al. fail to teach the system (in claim 1), the method (in claim 11), and the apparatus of (claim 22), respectively, wherein the task that performs an analysis of use of network resources includes operations compatible with the Java object-oriented programming language. Susilo et al. teach a use of mobile agents performing task for network management wherein the task includes operations compatible with the Java object-oriented programming language (Abstract; Requirements 1 and 2, page 324, 3<sup>rd</sup> paragraph, and page 325, 1<sup>st</sup> paragraph; Security, the entire page 328). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to enable the task to include operations compatible with Java object-oriented programming language because Java provides security and portability that are necessary for secure task distribution (Abstract; Security, the entire page 328; Summary, page 332, 1<sup>st</sup> paragraph).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alina N Boutah whose telephone number is (703) 305-5104. The examiner can normally be reached on Monday-Thursday (9:00 am-7:00 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on (703) 308-5221. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

ANB

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